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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,971	10/27/2006	Olivier Mathieu	1022702-000287	2502

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EXAMINER

SHEH, ANTHONY H

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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07/16/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/554,971	Applicant(s) MATHIEU ET AL.	
	Examiner Anthony H. Sheh	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-39 is/are pending in the application.
- 4a) Of the above claim(s) 38 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 21-37 in the reply filed on June 25, 2010 is acknowledged. The traversal is on the ground(s) that no search burden is present. This is not found persuasive because the basis of the restriction was not founded upon the assertion of a search burden. The basis of the restriction set forth in the Office action mailed May 26, 2010 lies in the lack of unity of invention. The requirement is still deemed proper and is therefore made FINAL.
2. Claims 38 and 39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected claims, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on June 25, 2010.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on French application FR 03/05165, filed April 28, 2003. It is noted, however, that applicant has not filed a certified copy of the French application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 21-37 rejected under 35 U.S.C. 102(b) as being anticipated by Bougelot et al., WO 02/16264 A1 (hereafter '274, for which US 2004/0033186 A1, hereafter '186, has been adopted as an English-language equivalent).

6. Regarding claims 21-25, '186 discloses compositions comprising a lamellar compound based on zirconium and/or titanium phosphate (para. [0049]). The composition also comprises a macromolecular material having thermoplastic nature (para. [0050]). The zirconium phosphate compound is embodied by particles having lamellar structure, wherein the lamellae have size between 200 and 500 nm (para. [0105]). The particles are composed of composed of stacks, wherein the thickness of the stacks along the direction perpendicular to the platelets is approximately 200 nm (para. [0105]). This data yields particles having aspect ratio between about 1 and 2.5. The prior art effectively discloses an aspect ratio range which encompasses all the particles, i.e. 100% of the particles have aspect ratio between about 1 and 2.5. It is also noted that the zirconium phosphate particles are formed via a method substantially identical to the method disclosed on pages 12 and 13 of the instant specification. Accordingly, the limitations of instant claims 21-25 are met.

7. Regarding claims 26 and 27, the proportion of the lamellar material present in the composition is less than or equal to 5% (para. [0058]).

8. Regarding claim 28, '186 discloses zirconium phosphate compounds (para. [0105]).

9. Regarding claim 29, '186 teaches a composition comprising a matrix composed of a macromolecular material and lamellar compound which is at least partially dispersed in the form of leaves, i.e. exfoliated (para. [0049]). In this case, both non-exfoliated and exfoliated lamellar compounds are present. The exfoliation agent may be e.g. an inorganic base, an organic base, or caprolactam (para. [0110]-[0112]).

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10. Regarding claims 30-32, the thermoplastic macromolecular materials include polyamides and polyolefins (para. [0052]). The polyamides may be e.g. polyamide-6,6 (para. [0053]). The polyolefin may be polypropylene (para. [0051]).

11. Regarding claims 33-37, '186 discloses a method of introducing the lamellar compound into a thermoplastic polymer. In the context of polyamides, the lamellar compounds are introduced into the medium comprising the monomers of the polyamide to be manufactured. The polyamide is then polymerized. The lamellar compounds may also be mixed into the thermoplastic polymer via melt blending (para. [0055]).

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 21-32 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 7,238,738 B2 (hereafter '738).

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14. Applicants attention is drawn to MPEP 804 where it is disclosed that “the specification can always be used as a dictionary to learn the meaning of a term in a patent claim.” *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

15. '738 claims a material comprising a thermoplastic matrix and a nanoparticulate compound based on zirconium phosphate having individual leaves with an aspect ratio of equal to or greater than 250 (clm. 1). At least a portion of the compound is dispersed as individual leaves (clm. 5). Relying on the '738 specification as a dictionary, the compound has aspect ratio between 1 and 2.5 (col. 8, ln. 49-61). The distinction between the aspect ratio of the leaves and of the compound should be noted. The thermoplastic is polyolefin or polyamide (clm. 2, 3), e.g. polyamide-6,6. Accordingly, there is substantial overlap between the instant claims and the '738 claims.

16. Claims 21-32 are directed to an invention not patentably distinct from claims 1-5 of commonly assigned U.S. Patent No. 7,238,738 B2 (hereafter '738). Specifically, see paragraphs 13-15 *supra*.

17. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned '738, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the

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invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

18. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

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Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony H. Sheh whose telephone number is (571)-270-7746. The examiner can normally be reached on Monday thru Thursday, 9:30a to 3:30p.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu S. Jagannathan can be reached on (571)-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony H Sheh/
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796